

NOTES ON *LACHNUS CARYÆ*, HARRIS, UNDER A NEW NAME.

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On comparing the descriptions of Harris, Monell and Riley, and specimens of this species collected from hickory, black oak, sycamore and basswood, I am of the opinion that *Lachnus longistigma*, Monell, and *Lachnus platanicola*, Riley, are synonyms of the above species, which conclusions were reached after collecting a large number of specimens, and a careful study of all forms from different host plants. I have also concluded that this so-called *Lachnus* is not a *Lachnus*, and have formed a new genus, with this species as the type of the genus.

LONGISTIGMA, n. g.

The name *Longistigma* is given on account of the extremely long, slender stigma which reaches around the end of the wing.

The honey tubes are short, conical and of fair size. The stigma and honey tubes are the distinguishing characters. Antennæ and wing-veins similar to those of the genus *Lachnus*.

Longistigma caryæ, Harris.

Synonymy: *Aphis caryæ*, Harris, Ins. Inj. Veg., 1841; id., Flint, ed., 1862; *Lachnus caryæ*, Rept. Ins. N. Y., 3: 443, 1856; Walsh, Proc. Ent. Soc. Phila., 1: 302, 1861; Thos. Rept. Ent. Ill., 8: 116, 1880; Oestl. Aph. Minn., 32, 1887; Packard, Forest Ins., 299, 323, 1890.

Lachnus longistigma, Monell, Valley Naturalist, June, 1878; Thos. Rept. Ent. Ill., 8: 119, 1880; Townsend, Ins. Life, 2: 90, 1889; Oestl. Aph. Minn., 32: 1887; Osborn, Cat. Hem. Ia., 29, 1892.

Lachnus platanicola, Riley, Am. Nat., 17: 198, 1883; Townsend, Ins. Life, 1: 197-198, 1889; Oestl. Aph. Minn., 32, 1887; Weed, Ins. Life, 3: 286-287, pl. 1, fig. 1-4, 1892.

Collected by myself, September 27, 1909, on hickory, black oak, basswood, sycamore and silver-leaf maple.

This is without doubt the largest species yet known in America, and should not be easily mistaken. Those specimens on the oak have wings darker than those on the other host plants, but this is probably due to the food. On the same host plants this species varies considerably in size and colour.

In the vicinity of Washington the eggs hatch as early as March 11th, and the egg-laying females can be found as late as Dec. 2nd.

Aphis caryæ, Harris, Ins. Inj. to Veg., 1841.

"The largest species known to me is found in clusters beneath the limbs of the pignut hickory (*Carya porcina*), in all stages of growth, from the first to the middle of July. It is the *Aphis caryæ* of my catalogue. Its body, in the winged state, measures one-quarter of an inch to the end of the abdomen, and above four-tenths of an inch to the tips of the upper wings, which expand rather more than seven-tenths of an inch. It has no terminal stylet, and the honey tubes are very short. Its body is covered with a bluish-white substance like the bloom of a plum, with four rows of little transverse black spots on the back; the top of the thorax and the veins of the wings are black, as are also the shanks, the feet and the antennæ, which are clothed with black hairs; the thighs are reddish brown. This species sucks the sap from the limbs and not from the leaves of the hickory."

I have used the description of Mr. C. M. Weed as given to this species under *Lachnus platanicola*, p. 286, Vol. III, Insect Life, which also helps to explain the synonymy, and is complete except the mention of the long, slender, curved stigma, which is shown in his illustrations.

DESCRIPTION.

"Apterous viviparous female: Body 6 millimeters long by 3.5 millimeters wide across middle of abdomen; antennæ 3 millimeters long; posterior legs 9 millimeters long.

"General colour light brown, with a glaucous bloom. Antennæ, eyes, most of head, two triangular spots united basally on middle of pronotum, a large quadrangular spot on middle of mesonotum, one row of small spots on each side of the dorso-meson on the segments posterior to this, another row along each side margin of all the dorsal segments, and a few smaller spots between the middle abdominal terga, together with cornicles, black; coxæ dusty; trochanters and femora, except tips, reddish-brown; tips of femora, together with tibiæ and tarsi, black, except that the middle of the tibia is often reddish-brown. Cornicles very short, conical, truncate. Ventral surface dusky, with a glaucous bloom. Rostrum dusky, reaching posterior coxæ. Body, legs and antennæ furnished with rather long, light-brown hairs. Antennæ roughened; joint iii very long, equal to iv plus v, the latter being subequal, though v is slightly longer than iv; vi short, with a well-developed thumb, forming vii; v slightly enlarged near tips by a distinct sensorium; and another on vi, at the base of the projecting thumb.

"Winged viviparous female: Body, 6 millimeters long by 3.5 millimeters wide across middle of abdomen; head to tip of folded wings, 10 millimeters; wing expanse, 18 millimeters; antennæ, 3 millimeters; posterior legs, 11 millimeters.

"Head and thorax bluish-black, with a glaucous bloom; antennæ and cornicles black; dorsum of abdomen whitish, with two rows of black spots on each side of median line, and a transverse series of small, black, indented dots on each segment. Cornicles short, conical, truncate. Ventral surface of abdomen yellowish-brown, with a glaucous bloom. Coxæ concolorous with thorax; trochanters and femora, except tips, reddish-brown; tips of femora, together with tibia and tarsi, black. Rostrum dusky, reaching posterior coxæ. Body, legs and antennæ clothed with rather long, light brown hairs. Joints of antennæ of same relative length as in apterous viviparous form. Wings clouded, especially towards base; insertions reddish brown; veins piceous.

"Oviparous female: This form does not differ in external appearance from the apterous viviparous female.

"Winged male: Body, 5 millimeters long by 2 millimeters wide, across middle of abdomen; head to tip of folded wings, 9 millimeters; wing expanse, 16 millimeters; antennæ, 2.4 millimeters; posterior legs, 8 millimeters.

"Head and thorax bluish-black, with a glaucous bloom; antennæ piceous; eyes black. Abdomen small, dorsum whitish, but nearly covered with two rows of large black spots on each side of the dorso-meson, and having transverse rows of less distinct indented black dots. Ventral surface of abdomen yellowish-brown, with a glaucous bloom, except posterior extremity, which is black. Coxæ concolorous with thorax; trochanters and femora, except tips, reddish-brown; tips of femora, together with tibiæ and tarsi, black. Rostrum dusky, reaching slightly behind posterior coxæ. Cornicles black, conical, truncate. Body, legs and antennæ clothed with rather long, light-brown hairs. Antennæ roughened; joints of same relative length as in apterous viviparous female. Eyes as seen from above subtriangular in form. Wings clouded; insertions light yellowish-brown; veins piceous.

"Egg: Length, 1.8 millimeters; width, 0.5 millimeter. Elongate-ovoid. Orange-brown at first, but changing on exposure to shining black. Covered when first laid with a viscid substance by which it is securely attached to the bark of the twig or limb. Great numbers deposited together."